

NAIP Post-Season Meeting

November 17, 2004



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Completion Rates & Season Extensions:

States	FLM	DOQQ's	Acq. Window	Date Comp.	Extensions	% Completed
CA	22,385	4,983	7/1-7/31	8/27	2-two wk ext.	100%
WA	14,665	3,252	6/15-9/1	9/08	1-two wk ext.	100%
OR	24,589	5,522	6/15-9/1	9/23	2-two wk ext.	100%
UT	15,163	3,028	7/1-9/10	9/15	1-one wk ext.	100%
OH	13,219	3,077	6/20-8/15	9/22	3-two wk ext.	100%
KY	12,624	2,948	6/15-8/15	11/13	6-two wk ext.	100%



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States	FLM	Acq. Window	Completion	
CA	22,385	7/1-7/31	8/27	Completed all but 184 FLM by 7/26
WA	14,665	6/15-9/1	9/08	
OR	24,589	6/15-9/1	9/23	Completed all but 1971 FLM by 9/1
UT	15,163	7/1-9/10	9/15	Completed all but 421 FLM by 9/10
OH	13,219	6/20-8/20	9/22	Only flew 5 hours in July after 7/1
KY	12,624	6/15-8/15	11/13	A complete weather disaster area



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Reasons for Acquisition Season Extensions :

- 1) Marine Layer in CA
- 2) Failure to second guess the weather in one state while it was good in a second state
- 3) Airplane Maintenance for Conquest (no exception when the 200 hour Phase is due)
- 4) Decision to maintain four planes in OH & three planes in KY
- 5) Attempting to take photography during monsoonal season in OH, KY & UT Only a few hours total for all three states were available for taking imagery during the month of July.
- 6) Family emergency for one of our pilots.



7) Equipment malfunction:

a) Camera failure – (three times)

b) Airplane alternator – (twice)

c) Operator malfunction – (once but affected two days of imagery)



Airspace/FAA Issues:

- 1) The USDA letter was extremely helpful, especially in CA
- 2) Most controllers were very accommodating.
- 3) Experienced normal conditions around MOA areas which means many times restricted to flying only on weekends
- 4) RVSM will be a factor after January 1, 2005 for altitudes above 29,000' ASL but will also affect flights below 29,000' ASL



Ortho Processing:

1) Problem:

Calibration differences between USDA monitors and our monitors.

1) Solution:

a) Several submittals to zero in on difference – made ours more cyan and green

b) Prior to next year, take monitor to USDA and calibrate identical to USDA's

2) Problem:

Seamless submittal achieved by radiometric balance of entire county produced a bland product.

2) Solution:

Radiometric balancing of the individual DOQQ's



3) Problem:

Inability to match Source material for one of the following reasons:

- a) Source data is incorrect; what action should be taken?
- b) The DEM data available is incorrect; is the contractor to correct DEM?
- c) The new rectification solution is incorrect; the ortho must be regenerated.

3) Solution:

In OH a new and improved set of Source Data was provided.

Question: How much should PhotoShop be used to make imagery match between the Source material and the new DOQQ?



Screen Shot of Incorrect Source Material from Ohio:



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Ortho Processing Capacity:

- 1) Total capacity more than sufficient for total DOQQ's required before having acquisition delayed on some states which jammed up the production area.
- 2) Time schedule so tight – no margin for error's.
- 3) Ability to deliver on time affected by acquiring majority of imagery early in season versus late in the acquisition window



Data Delivery/Delay Reasons:

- 1) Weather
- 2) Discrepancy in color balance
- 3) Failure of DVD's to open
- 4) Failure to have sufficient workstations available
- 5) Incorrect Source Data



Subcontractor Management:

Acquisition

- 1) Subcontractor monitored two areas in CA for 26 days while we moved to another area.
- 2) OH was flown with three different contractors and four different aircraft; only one problem with the air-traffic controllers.
- 3) KY was flown with three different contractors and a total of five aircraft. Only parts of two lines were flown twice.
- 4) Flight OPS manual prepared and provided to all acquisition contractors prior to starting project.



- 1) Four firms were scanning to keep up with demand.
- 2) Two types of scanners were utilized: Vexcel and Z/I auto-scanners
- 3) Proprietary software was provided to each of the subs to maintain consistency in color balance, reducing film hot spots and performing radiometric corrections.



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- 1) Three different firms created DOQQ's.
- 2) One of the six states was split between two contractors to deliver entire state on time.

I don't think I will attempt this again soon.
- 3) If a schedule gets derailed for some reason, it's almost impossible to switch and bring the work back in house and to get back on schedule.



Closing Comments:

Horizons is pleased to be a part of the USDA's NAIP Program and be able to come together with other NAIP Contractor's to help make it even more successful.

The USDA has been very bold in it's vision and we as contractor's need to figure out a way to work as a team during the acquisition season to get the most imagery acquired during the growing season in support of the USDA.

